

**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Date December 19, 2003

In re the Application of

Masatoshi TAKANO et al.

Application No.: 09/833,579

Filed: April 13, 2001

For: CALCULATION METHOD OF DISCHARGE AND TRANSFER AMOUNT OF CHEMICAL  
SUBSTANCES AND SERVER AND SYSTEM THEREOF



Group Art Unit: 2857

Examiner: Carol S. W. Tsai

Docket No.: 109049

**LARGE ENTITY PETITION FOR 1<sup>st</sup> - 3<sup>rd</sup> EXTENSION  
OF TIME UNDER 37 C.F.R. §1.136(a) AND  
TRANSMITTAL OF FEE UNDER 37 C.F.R. §1.17**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is a response to the outstanding Official Action in the above-identified patent application. The shortened statutory period having expired November 19, 2003, an extension of time for a period of one month is hereby requested. Attached hereto is our Check No. 149398 in the amount of \$110.00 in payment for:

XX Extension fee for response within first month pursuant to §1.136(a) (\$110.00)  
       Extension fee for response within second month pursuant to §1.136(a) (\$420.00)  
       Extension fee for response within third month pursuant to §1.136(a) (\$950.00)

The Commissioner is hereby authorized to charge any additional fee or credit any overpayment associated with this communication to Deposit Account No. 15-0461. Two copies of this petition are enclosed.

Respectfully submitted,

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JAO:PFD/can

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**DEPOSIT ACCOUNT USE  
AUTHORIZATION**  
Please grant any extension  
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**PATENT APPLICATION**

**RESPONSE AFTER FINAL REJECTION  
EXPEDITED PROCEDURE  
TECHNOLOGY CENTER ART UNIT 2857**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Masatoshi TAKANO et al.

Group Art Unit: 2857

Application No.: 09/833,579

Examiner: Carol S.W. Tsai

Filed: April 13, 2001

Docket No.: 109049

For: CALCULATION METHOD OF DISCHARGE AND TRANSFER AMOUNT OF  
CHEMICAL SUBSTANCES AND SERVER AND SYSTEM THEREFOR

**REQUEST FOR RECONSIDERATION AFTER FINAL REJECTION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In reply to the August 19, 2003 Office Action, the period for response being extended by the Petition for Extension of Time attached hereto, reconsideration is respectfully requested in light of the following remarks.

Claims 1-13 are pending in this application.

The Examiner is thanked for the many courtesies extended to Applicants' Attorney in the course of a personal interview conducted December 15, 2003. The substance of the interview is included herein per MPEP §713.04.

**I. Request for Acknowledgment of Claim for Priority and  
Receipt of Certified Copies of the Priority Documents**

The August 19, 2003 Office Action does not acknowledge the claim for priority under 35 U.S.C. 119 and does not acknowledge receipt of the certified copies of the priority

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documents. The claim for foreign priority was made and the certified copies of the priority documents were filed on June 6, 2001. Applicants have enclosed a copy of "PTO Receipt for Filing of Papers" which was stamped by the U.S. Patent and Trademark Office to confirm the claim for foreign priority and the receipt of the certified copies of the priority documents. Acknowledgement of the claim for foreign priority and receipt of the certified copies of the priority documents is respectfully requested.

## **II. Claims Define Allowable Subject Matter**

### **A. Claims 1-9**

The Office Action rejects claims 1-9 under 35 U.S.C. §102(b) as unpatentable over JP 2000-029900 to Ichikawa et al. ("Ichikawa"). This rejection is respectfully traversed.

Ichikawa does not disclose, teach or suggest "a step of inputting and storing a data which indicates a material, a use step of the material and a use amount of the material which are transmitted from a client terminal through a network," as recited in claim 1.

Further, Ichikawa does not disclose, teach or suggest:

"a step of searching a database of a material balance coefficient which stores a ratio in which the chemical substance is discharged and transferred by every separate whereabouts of the chemical substance including at least one of air, water basin, and a product corresponding to the chemical substance and the use step of the material by using the searched chemical substance and the inputted use step of the material as a key, and searching for the discharge and transfer ratio by every separate whereabouts when the searched chemical substance is used in the inputted use step of the material;" as recited in claim 1.

The Office Action asserts that Ichikawa teaches a material balance coefficient, which stores a ratio in which the chemical substance is discharged and transferred by every separate whereabouts of the chemical substance including air, water basin and a product corresponding to the chemical substance. The Office Action refers to paragraph [0004] of Ichikawa, which recites, "In PRTR, the component of the specification matter and movement of an amount are

investigated through a life cycle, and it supervises strictly how much it is discharged by the atmosphere, soil, the drainage system, etc...."

However, Ichikawa does not disclose, teach or suggest the material balance coefficient database which stores a ratio in which the chemical substance is discharged and transferred. Moreover, Ichikawa does not disclose, teach or suggest a material balance coefficient database storing a "use step" of a material and the capability of searching the database by using the "use step."

Ichikawa teaches promoting the enrichment of a component database for registering the incorporated states of environmentally hazardous substances included in materials specified by environmental pollutant removal/transfer registration (PRTR). For example, Ichikawa teaches business corporations forming a component database for registering hazardous substances included in materials as specified by PRTR. A first supplier of material A registers in the component database a hazardous chemical substance P, which is contained by a% percent in the material A. In addition, a second supplier of material B registers in the component database the chemical substance P, which is contained by b% in the material B.

If a manufacturer wishes to manufacture a material D, which is prepared from materials A and B, the manufacturer of material D can access the information regarding material A and material B from the component database, so that the manufacturer knows the contents of the chemical substance P in the materials A and B. This permits the manufacturer of material D to calculate the content of the chemical substance P in the material D, which the manufacturer registers in the component database, so that the manufacturer can supply material D to another manufacturer or customer.

However, Ichikawa does not take into account the "use step of the material" in performing the calculations. Ichikawa does not disclose, teach or suggest a method for taking into account the discharge and transfer amounts of materials A and B to produce material D

because Ichikawa does not take into account the use step for producing material D. For example, the discharge and transfer amount of materials A and B differ based upon the "use step" employed to produce material D. Examples of different "use steps" for producing material D include immersing a material in material A containing a% of the chemical substance P, coating a material with material A containing a% of the chemical substance P, and spraying material A containing a% of the chemical substance P on a material during the manufacturing process of material D. Ichikawa does not disclose, teach or suggest the "use steps."

Further, the life cycle referred to in paragraph [0004] of Ichikawa only refers to the manufacture of product based on the chemical substances, the use of the product after the product is manufactured, and the retirement of the product. Ichikawa does not disclose, teach or suggest that the life cycle pertains to "use step of the material."

Similarly, Ichikawa does not disclose, teach or suggest:

"a step of searching a material balance coefficient database that stores a rate of which chemical substances are discharged and transferred by every separate whereabouts of the chemical substances including at least one of air and products in association with the chemical substances, material use step, and discharge step by defining as a key the searched chemical substances, inputted material use step, and discharge step, and then, searching a discharge and transfer rate by every separate whereabouts when the searched chemical substances are discharged at the discharge step used and inputted at the inputted material use step," as recited in claim 2 and similarly recited in claim 3.

With respect to claim 4, Ichikawa does not disclose, teach or suggest "a stage of displaying a hierarchically classified material use step list on the client terminal, and then, prompting the client to input the material use step;...a stage of inputting to the server the use material, material use amount, and material use step..." as recited in claim 4.

Similarly, Ichikawa does not disclose, teach or suggest:

"a database of a material balance coefficient which stores a ratio in which the chemical substance is discharged and transferred by every separate whereabouts of the chemical substance including at least one of air, water basin, and a product corresponding to the chemical substance and the use step of the material;

means for searching for the database of a material balance coefficient using the searched chemical substance and the inputted use step of the material as a key, and searching for the discharge and transfer ratio by every separate whereabouts when the searched chemical substance is used in the inputted use step of the material;" as recited in claim 5.

Further, Ichikawa does not disclose, teach or suggest:

"means for inputting and storing data indicating a material, a material use step, a material use amount, and a discharge step;...

a material balance coefficient database that stores a rate of which the chemical substances are discharged and transferred by every separate whereabouts of the chemical substances including at least one of air, water basin, and a product in association with the chemical substances, material use step, and discharge step;

means for searching the material balance coefficient database by defining the searched chemical substances, inputted material use step, and discharge step as a key, and then, searching the discharge and transfer rate by every separate whereabouts when the searched chemical substances are discharged at the discharge step used and inputted at the inputted material use step;" as recited in claim 6.

Ichikawa does not disclose, teach or suggest:

"a server for calculating a discharge and transfer amount of chemical substances, the server calculating the discharge and transfer amount by every separate whereabouts of chemical substances, and transmitting the calculation result to the client terminal by employing a material component database that stores contained chemical substances and their contents in association with materials and a material balance coefficient database that stores a rate of which the chemical substances are discharged and transferred by every separate whereabouts of the chemical substances including at least one of air, water basin, and a product in association with the chemical substances, material use step, and discharge step," as recited in claim 7 from which claims 8-13 directly or indirectly depend.

As discussed above, Ichikawa does not teach or suggest a material balance coefficient database storing a ratio in which the chemical substance is discharged and transferred by every separate whereabouts of the chemical substance and the use step of the material as well as the capability of searching for the discharge and transfer ratio by every separate whereabouts when the search chemical is used in the inputted use of the material and calculating the discharge and transfer amount of the chemical substances based on the searched discharge and transfer amount, the inputted use amount of the material and the searched content.

Since claims 8 and 9 depend directly, from claim 7, they are distinguishable from Ichikawa for the reasons discussed above and for the additional features recited in claims 8 and 9.

Accordingly, withdraw of this rejection is respectfully requested.

B. Claims 10, 12 and 13

Claims 10, 12 and 13 are rejected under 35 U.S.C. §103(a) as unpatentable over Ichikawa in view of U.S. Publication 2002/0026339 to Frankland et al. ("Frankland"). This rejection is respectfully traversed.

Ichikawa and Frankland, taken separately, or in combination, do not disclose, teach or suggest:

"a server for calculating a discharge and transfer amount of chemical substances, the server calculating the discharge and transfer amount by every separate whereabouts of chemical substances, and transmitting the calculation result to the client terminal by employing a material component database that stores contained chemical substances and their contents in association with materials and a material balance coefficient database that stores a rate of which the chemical substances are discharged and transferred by every separate whereabouts of the chemical substances including at least one of air, water basin, and a product in association with the chemical substances,

material use step, and discharge step," as recited in claim 7 from which claims 10, 12 and 13 directly or indirectly depend.

Frankland teaches a management system for updating computer software based on changes in government regulations. The Office Action asserts that Frankland et al. teaches a material component database storing link information indicating an address of the component information of each material that exists in the material supplier server. Although, Frankland teaches a relational database, Frankland does not specifically teach a material component database. Moreover, neither Ichikawa nor Frankland takes into account the "use steps" when calculating the discharge or transfer amount of chemical substances.

In addition, Frankland does not teach or suggest printing out in a document format or in an intensive document format discharge and transfer amount of chemical substances as recited in claims 12 or 13.

Accordingly, withdrawal of this rejection is respectfully requested.

C. Claim 11

Claim 11 is rejected under 35 U.S.C. §103(a) as unpatentable over Ichikawa in view of Frankland and further in view of U.S. Patent No. 5,983,225 to Anfindsen. This rejection is respectfully traversed.

Ichikawa, Frankland and Anfindsen, taken separately, or in combination does not disclose, teach or suggest:

"a server for calculating a discharge and transfer amount of chemical substances, the server calculating the discharge and transfer amount by every separate whereabouts of chemical substances, and transmitting the calculation result to the client terminal by employing a material component database that stores contained chemical substances and their contents in association with materials and a material balance coefficient database that stores a rate of which the chemical substances are discharged and transferred by every separate whereabouts of the chemical substances including at least one of air, water basin, and a product in association with the chemical substances,



material use step, and discharge step," as recited in claim 7 from which claim 11 depends.

Ichikawa, Frankland and Anfindsen, taken separately or in combination, do not disclose, teach or suggest a material balance coefficient storing a "use step" and the capability of searching the database by using the "use step."


For at least these reasons, it is respectfully submitted that independent claims 1-7 are distinguishable over the applied art. The remainder of the claims that depend from independent claim 7 are likewise distinguishable over the applied art for at least the reasons discussed above, as well as for the additional features they recite.

### **III. Conclusion**

For at least these reasons, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-13 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number set forth below.

Respectfully submitted,



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Registration No. 27,075

Paul F. Daebeler  
Registration No. 35,852

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Attachment:  
Petition for Extension of Time

Date: December 19, 2003

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